

Appl. No.: 10/632,980  
Amdt. Dated: \_\_ June 2005  
Reply to Office Action mailed 03/04/2005

### **Remarks/Arguments**

Receipt of the Office Action mailed 03/04/2005, marked FINAL, is hereby acknowledged. In that Office Action, the Examiner has objected to claims 18 and 20 for spelling informalities, rejected claims 1-14 under 35 U.S.C. 112, second paragraph, as being indefinite, and rejected claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over Irvine '973 in view of Everett '959 and Smith '747 or Penney '891.

#### **Objection to claims 18 and 20**

Claim 18 has been amended to correct the spelling of "wheel" and claim 20 has been amended to correct the spelling of "braking". As amended these claims are submitted as free of the Examiner's objection.

#### **Rejection under 35 U.S.C. 112**

The claims in the case have been reviewed and as amended are believed free of rejection under this section as being indefinite.

#### **Rejection under 35 U.S.C. 103(a)**

The claims at issue have been rejected under 35 USC 103. The Examiner's rejections are respectfully traversed as outlined below.

The concepts to be adhered to when applying a rejection under 35 U.S.C. 103 have been set forth in summary fashion by Judge Rich in the footnote at page 187 of *Hodosh v. Block\_Drug Co., Inc.* (Fed. Cir. 1986) 229 USPQ 182, as follows:

"(1) the claimed invention must be considered as a whole.... (though the difference between claimed invention and prior art may seem slight, it may also have been the key to advancement of the art);

(2) the references must be considered as a whole and suggest the desirability and thus the obviousness of making the combination .. ;

(3) the references must be viewed without the benefit of hindsight vision afforded by the claimed invention .. ;

4) 'ought to be tried' is not the standard with which obviousness is determined .. ;"  
(emphasis added)

Accordingly, it is submitted that in rejecting claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over Irvine '973 in view of Everett '959 and Smith '747 or Penney '891, the Examiner has violated each of the above quoted concepts, particularly "the claimed invention must be considered as a whole"; "the references must be considered as a whole and suggest the desirability and thus the obviousness of making the combination"; and "the references must be viewed without the benefit of hindsight vision afforded" by the disclosure and claims.

### Reference of Irvine

In regard to the rejection of claims 1-20 over Irvine '973, the Examiner dissects the Irvine reference and states:

"The Irvine reference is strikingly similar to applicants, except for the multiple brake pad configuration, different materials, and end cap construction. All these features, however, are notoriously well known in the art; and one having ordinary skill in the art at the time of the invention would have found it obvious to have made the different pad sections shown in figure 3 of Irvine from multiple abutting pad sections having differing compounds, as taught collectively by Everett and Smith or Penny, to achieve a particular set of brake and wear characteristics desired from the pad".

This is not a rejection of the type envisioned by the concepts in Hodosh, but an example of the reason for the specific requirements set forth in Hodosh.

The Examiner admits there is no showing in Irvine of (1) multiple brake pads having different braking compounds in sequential abutting relationship, or, of (2) closure means in the form of an end cap for complementary mating with the truncated end to secure the multiple brake pads as recited by applicant. In addition, among other now claimed structure and function, Irvine does not teach or suggest, for instance, applicant's brake pad holder having a longitudinal transverse curvature in conformance with the radius of the bicycle wheel rim.

Actually, Irvine is directed to a brake pad holder designed for adjustably mounting a bicycle brake pad to a brake caliper arm, and as seen in Fig. 3 the pad means 28 is only "similar" to applicants brake pad in that there is merely shown a groove 34 in the brake pad mount 28 for receiving a single brake pad 12 held in place by an outside screw 38 extending through mount 28 into pad 12. Clearly there is no teaching or suggestion of applicants claimed brake pad assembly.

Thus, the Examiner first ignores the fact that Irvine in Figure 3 merely shows a pad holder "similar" to applicants and then ignores the fact that there is no teaching in Irvine of applicants' claimed invention. Any conclusion reached by the Examiner relative to the applicants' invention is pure speculation, and hindsight, not to mention a piecemeal application of the reference. At best Irvine can only be "remindful of", in a hindsight manner, to applicants' invention.

### Reference of Everett

The Examiner has used the same sort of reasoning with the Everett reference wherein he has relied upon the teachings of Everett to show it is well known to create brake pads having different compounds for desired braking and wear characteristics, and notes figure 5. However, Everett provides for engagement of one brake segment entirely within a second brake pad segment, and engagement with the sidewall is along an axis normal to the contact surface plane. A user would thus be required to either remove the brake pad from the bicycle or remove the wheel from the bicycle to remove and replace a pad segment along an axis normal to the contact surface plane.

Further, the Everett brake pad, although composed of segments of differing compounds or having different textures, does not teach and does not feature brake pad segments which can conveniently be interchanged or replaced by the user. Because Everett teaches engagement of the segment with the brake pad along an axis normal to the contact surface plane, either the brake block or the wheel must be removed to interchange brake pad segments. The claims remaining in the case have been amended, directly or indirectly, to recite the claimed brake pad segments slide

along a direction or axis parallel to the contact surface plane, which allows for replacement of pad segments without removal of the brake block or the bicycle wheel.

Additionally, Everett discloses in one embodiment a main body brake pad with a removable insert portion totally enclosed by the main portion, the main body portion and the insert portion being of different braking compounds for providing different braking characteristics. In another embodiment (Figure 5) there is disclosed more than one brake pads of different braking compounds for providing different braking characteristics, there again being a main body portion with the pad portions formed entirely within the main body portion. The different pad portions are either formed as snap inserts in the main body portion or molded unitarily with the main body portion. There is absolutely no suggestion, much less a teaching, in Everett of, at least, the brake pad portions be individually molded as separate pads, or that such pads be longitudinally, sequentially and replaceably inserted into a recess in a brake pad holder having a longitudinaal transverse curvature.

It is thus seen that there is absolutely no suggestion, much less a teaching, in Everett of the teachings and claimed invention of applicant.

#### Reference of Penney

The Examiner has relied upon the teachings of Penney for teachings similar to Smith and notes the closure means in the area of c and f.

The wagon brake of Penney has (1) multiple pads of wood, or other suitable materials such as metal or rawhide, (2) pads that are slidably placed in transverse abutting arrangement within a recess in a brake shoe body, that is, normal to the axis of the contact plane, (3) a brake shoe that is curved to conform to the circular contact surface of the wagon wheel, and (4) a brake shoe that in use applies the brake pads directly to the ground contact surface of the wheel.

It is seen that in Penny there is no teaching of, suggestion of, or motivation for, (1) multiple pads of different elastomers having different braking characteristics, (2) pads that slide in the brake shoe in a direction parallel to the contact axis or surface plane, (3) a brake shoe having a planar contact surface but longitudinally curve in conformance with the curvature of the sidewall of the bicycle tire, and (4) a brake shoe having pads applied to the sidewall of the bicycle tire. Thus, in no way does Penney teach or suggests applicant's claim of invention. As clearly stated in Penny, "The object of my invention is to provide a brake shoe for road wagons, having a face which may be readily removed." The only similarity in the device of Penney and that of applicant's invention is that the brake means of Penney are replaceably installed entirely in a flanged recess in the casting of a brake shoe. There is absolutely no suggestion, much less a teaching, in Penney of the other teachings and claimed invention of applicant.

It is abundantly clear that there is no nexus between Penney and Everett such that the combination of their teachings would be capable of suggesting to one skilled in the art, without exercising inventive faculties, their combination in a manner disclosed in the claimed structure. Further, in view of the above it is clear that without applicant's disclosure one skilled in the art would be incapable of constructing the claimed structure without displaying creative genius.

As a simple example, if one takes the longitudinally curved brake shoe of Penney and replaces it with a transverse pad of Everett having inserts and/or moldings contained entirely within a body portion, the resulting device would not work since the different compounds would not engage the wheel surface simultaneously. Thus, the concept of turning the blocks of Penney 90% must be envisioned, otherwise the blocks would have to be each of different compounds, which is not taught by Everett. There still remains at least the concept of somehow modifying the device of Penney such that the brake shoe is planar and curved to be applied to the sidewall of the bicycle tire. From this simple example it is seen that even if the teaching of Penney and

Everett were somehow combined as vaguely suggested by the Examiner, there would not even result a workable device, much less applicant's claimed invention. Obviously the teachings of the claimed invention are necessary to somehow modify the device of Penney.

#### Reference of Smith

The Examiner has relied upon the teachings of Smith to show it is known to make a brake pad or shoe from multiple parts and notes element 2 and closure means at 9 and 10. Inasmuch as the teachings of Smith are so similar to the teachings of Penny the Examiner is referred to the above discussion of Penny. Thus, Applicant maintains that the argument against Penny applies equally well to the teachings of Smith, i.e., elements 2 corresponding to blocks B of Penny and the simple closure means 9 and 10 of Smith corresponding to the closure means of Penny.

#### Summary

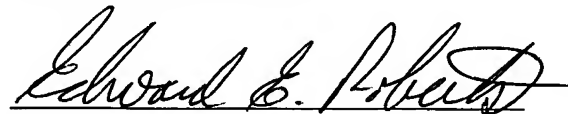
In view of the above, applicant submits that the Examiner has gone on a speculative and imaginative journey wherein he has ignored the holdings of Hodosh, as well as holdings in cases identified in applicant's response filed on 09 December 2004 which are incorporated herein by reference. It is submitted that the Examiner has not made even a rudimentary attempt to comply with the concepts to be adhered to when applying a rejection under 35 U.S.C. 103, he has dissected references in order to find a single limitation of applicants claimed invention to combine with other references to reject applicant's claims, and has used a piecemeal approach with an abundance of hindsight to reject the claims at issue. It is known that references must not be dissected or distorted without regard to the teachings or to the language of the claims to arrive at an unwarranted and unsubstantiated rejection.

Further, it is obvious that the combination of references as suggested by the Examiner would not result in applicant's claimed invention. It is abundantly clear that there is absolutely no suggestion in any of the cited references of the desirability that their teachings could somehow be modified or combined as suggested by the Examiner to result in applicant's claimed invention. Accordingly, applicant submits that the Examiners burden has not been met under 35 U.S.C.103(a) in that the limitations contained in applicant's amended claims are neither taught nor suggested in the references, either singly or in combination. It is respectfully requested that the Examiner's rejections be reconsidered and the claims in the case, that is, amended claims 1-20, be allowed and the case passed to issue.

A Request for Continued Examination (RCE) is enclosed along with form PTO 2038 for the required fee of \$395.00. It is hereby certified that this Amendment is being deposited with the United States Postal Service, postage prepaid, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on 6 June 2005.

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Respectively submitted,



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